## III. REMARKS

1. Claims 1, 8, and 11 are not unpatentable over Forslow in view of Titmuss, in view of Yang and Agarwal (U.S. Patent No. 6,470,049) under 35 U.S.C. §103(a). The combination of Forslow, Titmuss, Yang and Agarwal does not disclose or suggest **first** defining a compression method, **and then**, ***after that***, defining the radio bearer resources for the terminal, while simultaneously *taking into account the required capacity of the defined header field compression method in the radio bearer resources*.

Claim 1 recites defining a compression method of header fields in data packets used on the radio bearer. The compression method requires a bi-directional connection. **After defining the compression method**, defining the radio bearer resources for the terminal on the basis of an application used by the terminal on the radio bearer in such a manner that the resources also comprise the capacity required by the defined compression method of header fields in data packets.

This is not disclosed or suggested by the combination of Forslow, Titmuss, Yang and Agarwal.

Forslow discloses a method for allocating capacity and quality of service of a GPRS radio bearer based on the properties of an application flow requesting the radio bearer. Depending on a type of application requesting the radio bearer, it is determined whether the application is better suited for a circuit-switched or for a packet-switched connection. Then, various quality of service parameters are optimally selected for the radio bearer. (see e.g. Col. 10, lines 2-18.) Finally, prior to transmission, if a packet switched GPRS connection is selected, a subnetwork dependence convergence protocol (SNDCP) provides a compression of header fields of the data packets. (Col. 12, lines 29-34).

Thus, what is disclosed by Forslow is a method for an application-based capacity allocation where the parameters of the radio bearer are defined first, and then a compression method is defined for the headers of the data packets.

Although Forslow discloses that a header compression method can be defined, see e.g. Col. 12, lines 28-34, Forslow specifically teaches that a header compression method can be defined **only after defining** the parameters of the radio bearer first.

Also, Forslow discloses that a bearer type is selected in accordance with different prioritized criteria (Col. 12, lines 35-38). However, none of the criteria disclosed, see e.g. Col. 13-14, mentions the **capacity of the defined header field compression method** to be of any importance.

Forslow also discloses a BSSGP as a flow control protocol, which allows the BSS to start and stop PDUs sent by the SGSN (Col. 6, lines 7-15). Contrary to the examiner's assertions, this has nothing to do with defining the radio bearer resources such that the **capacity** of the **defined header field compression method** is taken into account.

Titmuss does not disclose or suggest an application based capacity allocation for defining a header field compression method, by any means.

Titmuss relates to apparatus and method for transmitting signals in multiple different formats. (Col. 1, lines 7-10). The embodiments of Titmuss provide a network that supports a number of different signal format conversions and is able to choose between the different terminals and associate different format capacities in the neighborhood of a given mobile user. (Col. 3, line 15-19). Titmuss includes a physical or bearer level that includes various terminals T1–T9 that are capable of receiving different signal formats. (Col. 4, lines 56-67). The process of routing an incoming call comprises inspecting the format of the call and delivering it to terminal nearby which is suitable to receive that format. (Col 7, lines 63-67). If the nearby

terminal cannot support the incoming signal format, routing logic can determine whether, after conversion by one or more of the converters, the message could be delivered in a format receivable by one or more of the terminals. (Col. 9, lines 56-62). In Titmuss, a communication initiated by first mobile party can be set up by the first party giving an indication of the format in which it will transmit, and if necessary receive and party from the transmission is intended. (Col. 11, lines 60-65). Each network managing agent assesses whether it can deliver a broadly corresponding service to the vicinity of the remote party and replies with a proposed service in a corresponding price. (Col. 11, line 66 to Col. 12, line 3). The initiating agent selects one of the proposals and the call is set up. The network agent negotiates with the resource agents to provide the service at the price within the specified constraints. (Col. 12, lines 4-11). There is no disclosure in Titmuss related to first defining a compression method of header fields in data packets and then defining the radio bearer resources for the terminal as claimed by applicant.

Thus, one of skill in the art would not be motivated to combine Titmuss with Forslow for the purpose of achieving what is claimed by applicant.

Neither Yang nor Agarwal discuss application based capacity allocation, as is claimed by Applicant.

Yang relates to a data compression arrangement. Yang comprises a compressor/decompressor to compress voice data and means to send voice data and call signaling data separately and in different data formats to the link layer in the air interface of the mobile station [0020]. In Yang, the IP/UDP/RTP header information is not used for routing. Instead all data including voice packets are related/tunnelled [0045]. Yang is directed to addressing the problem of large header loads in wireless telecommunications and have the need to transmit the combined headers of real-time transport protocol, user datagram protocol and Internet protocol in each packet header is a disadvantage [0016]. One solution, which is referred to by the examiner, is a protocol defined to compress and decompress the

headers [0018]. Paragraph [0094] referred to by the examiner relates to the solution where it is possible to completely remove the IP/UDP/RTP headers between the mobile station and CP and use a box called RTP agent as the decompressor in CN [0093]. However, what is not stated here or elsewhere in the Yang, is that a compression method is defined and then the radio bearer resources for the terminal are defined as is claimed by applicant. Yang merely talks about a compression method that includes removing the IP/UDP/RTP headers. This is not the same or similar to what is claimed by applicant. One of skill in the art would not be motivated to modify the systems of Forslow and Titmuss with the system of Yang that removes the IP/UDP/RTP headers in an effort to achieve the subject matter claimed by applicant, which includes defining a compression method of header fields and then defining the radio bearer resources that also include the capacity required by the defined compression method.

Although Agarwal relates to compressing and decompressing the headers of ATM cells or segmented packets, there is no disclosure in Agarwal related to defining a compression method of header fields and then defining the radio bearer resources that also include the capacity required by the defined compression method. Agarwal speaks to a scheme for packet header compression **only** in the TCP/IP suite of protocols. "That scheme applies only to TCP/IP packets; it generates variable sized compressed headers; it requires a fair amount of computational power to implement; it requires bi-directional traffic for every TCP connection." (Col. 4, lines 8-18). Thus, the application of Agarwal is limited to TCP/IP packets. While Agarwal talks about "bi-directional **traffic**" for every TCP connection, Applicant recites that the "compression method" requires a "bi-directional **connection**." What Agarwal does not disclose or suggest is defining a compression method of header fields and then defining the radio bearer resources that also include the capacity required by the defined compression method. One of skill in the art would not look to Agarwal from Forslow, Titmuss and Yang to achieve what is claimed by applicant.

The examiner, on page 7 of the Office Action, states that both Yang and Forslow disclose the feature that the header compression method is defined first and then the radio prayer resources for the terminal are defined. This is not correct. Yang in paragraph [0049] talks to the arrangements shown in figures 2a, 2b and 3 where it is assumed that the IP/UDP/RTP header information is not used for routing [0045]. Paragraph [0049 only speaks to the general benefits of this arrangement. There is no disclosure whatsoever here related to **first** defining a compression method of header fields and **then** defining the radio bearer resources that also include the capacity required by the defined compression method as claimed by applicant. The mere fact that the paragraph recites the terms "compression" and "resources" does not disclose or suggest what is claim by applicant.

Forslow, in Col. 12, lines 36-38, only states that the selection of a particular type of bear and the mapping of quality of service parameters may be performed in accordance with different prioritized criteria. There is absolutely no disclosure here or elsewhere in Forslow related to **first** defining a compression method of header fields and **then** defining the radio bearer resources that also include the capacity required by the defined compression method as claimed by applicant.

Although the examiner states that it is "logical" to compress header first in order to save bytes and then evaluate/defined radio bearer resources which comprise the capacity required by the client compression method of header field, it is respectfully submitted that the examiner has not shown any support for this statement. The examiner is respectfully requested to substantiate this statement with an evidentiary basis.

The technical capabilities disclosed by Titmuss in Cl. 20, lines 35-40 does not relate to what is recited by Applicant in the claims. Titmuss states that the service supplied means comprises a store storing data relating to the technical capacities collectively available from the plurality of resources with which it is associated. The service supply means relates to the telecommunications service supply means or

apparatus, with reference to Col. 18, lines 24-54. This is not what is recited by Applicant in the claims.

None of the cited documents address the problem caused by using an application based capacity allocation together with a header compression method, which requires a bi-directional connection. One of skill in the art would **not** be motivated to combine Forslow, Titmuss, Yang and Agarwal to produce a system where one **first** defines a header compression method, and **then**, taking into account the capacity of the defined header field compression method, **defines** the radio bearer resources for the terminal. Thus, it is respectfully submitted that a *prima facie* case of obviousness is not and cannot be established for purposes of 35 USC §103(a).

Applicant respectfully notes that Forslow, Titmuss, Yang and Agarwal have been combined improperly. References may be combined under 35 U.S.C. §103(a) only if the references are analogous art. In this case Forslow, Titmuss, Yang and Agarwal are not analogous art. A reference is analogous art if:

1) The reference is in the same field of endeavor as the applicant's, or

2) The reference is reasonably pertinent to the particular problem with which the applicant was concerned.

Applicant addresses the problem caused by using an application based capacity allocation together with a header compression method, which requires a bi-directional connection by **first** defining a compression method, **and then**, ***while*** *taking into account the capacity of the defined header field compression method,* defining the radio bearer resources for the terminal.

Forslow discloses a method for allocating capacity and quality of service of a GPRS radio bearer based on the properties of an application flow requesting the radio bearer. Depending on a type of application requesting the radio bearer, it is

determined whether the application is better suited for a circuit-switched or for a packet-switched connection. Then, various quality of service parameters are optimally selected for the radio bearer. (see e.g. Col. 10, lines 2-18.) Finally, prior to transmission, if a packet switched GPRS connection is selected, a subnetwork dependence convergence protocol (SNDCP) provides a compression of header fields of the data packets. (Col. 12, lines 29-34).

Titmuss is directed to apparatus and method for transmitting signals in multiple different formats. (Col. 1, lines 7-10). The embodiments of Titmuss provide a network that supports a number of different signal format conversions and is able to choose between the different terminals and associate different format capacities in the neighborhood of a given mobile user. (Col. 3, line 15-19). Titmuss includes a physical or bearer level that includes various terminals T1–T9 that are capable of receiving different signal formats. (Col. 4, lines 56-67). The process of routing an incoming call comprises inspecting the format of the call and delivering it to terminal nearby which is suitable to receive that format. (Col 7, lines 63-67). If the nearby terminal cannot support the incoming signal format, routing logic can determine whether, after conversion by one or more of the converters, the message could be delivered in a format receivable by one or more of the terminals. (Col. 9, lines 56-62). In Titmuss, a communication initiated by first mobile party can be set up by the first party giving an indication of the format in which it will transmit, and if necessary receive and party from the transmission is intended. (Col. 11, lines 60-65). Each network managing agent assesses whether it can deliver a broadly corresponding service to the vicinity of the remote party and replies with a proposed service in a corresponding price. (Col. 11, line 66 to Col. 12, line 3). The initiating agent selects one of the proposals and the call is set up. The network agent negotiates with the resource agents to provide the service at the price within the specified constraints. (Col. 12, lines 4-11). **Titmuss is not directed to and does not address the problem caused by using an application based capacity allocation together**

**with a header compression method, which requires a bi-directional connection.**

Yang is directed to a data compression arrangement that includes a compressor/decompressor to compress voice data and means to send voice data and call signaling data separately and in different data formats to the link layer in the air interface of the mobile station [0020]. In Yang, the IP/UDP/RTP header information is not used for routing. Instead all data including voice packets are related/tunnelled [0045]. Yang is directed to addressing the problem of large header loads in wireless telecommunications and have the need to transmit the combined headers of real-time transport protocol, user datagram protocol and Internet protocol in each packet header is a disadvantage [0016]. One solution, which is referred to by the examiner, is a protocol defined to compress and decompress the headers [0018]. Paragraph [0094] referred to by the examiner relates to the solution where it is possible to completely remove the IP/UDP/RTP headers between the mobile station and CP and use a box called RTP agent as the decompressor in CN [0093]. However, what is not stated here or elsewhere in the Yang, is that a compression method is defined and then the radio bearer resources for the terminal are defined as is claimed by applicant. Yang merely talks about a compression method that includes removing the IP/UDP/RTP headers. **Yang is not directed to and does not address the problem caused by using an application based capacity allocation together with a header compression method, which requires a bi-directional connection.**

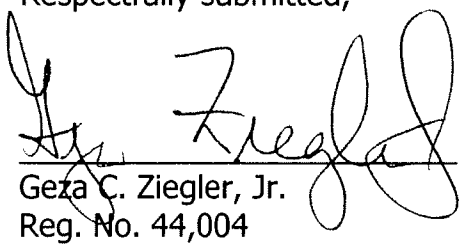
Agarwal is directed to compressing the header of ATM cells in order to provide greater bandwidth. Agarwal provides a frame format for a communication signal containing a bit stream (Col. 4, lines 30-35). The header compression algorithm used by Agarwal is based upon a lookup table. (Col. 4, lines 66-67). **Agarwal is not directed to and does not address the problem caused by using an**

**application based capacity allocation together with a header compression method, which requires a bi-directional connection.**

Thus, it is submitted that neither Forslow, Titmuss, Yang nor Agarwal are in the same field of endeavor as the applicant's, or are not reasonably pertinent to the particular problem with which the applicant was concerned. Therefore, the references are not analogous art and cannot be combined for purposes of 35 USC §103(a).

The Commissioner is hereby authorized to charge payment for any fees associated with this communication or credit any over payment to Deposit Account No. 16-1350.

Respectfully submitted,



14 FEB 2008

Geza C. Ziegler, Jr. Date
Reg. No. 44,004

Perman & Green, LLP
425 Post Road
Fairfield, CT 06824
(203) 259-1800
Customer No.: 2512